Niveau(x) d'enseignement: 3 Numéro EDUQ : 8270381
Centre d'intérêt: 74

Genesee, Fred.

Evaluation of the 1973-1974 grade IV French-immersion class / by Fred Genesee, Sandra Morin, Terri Allister. -- [Montréal] : Commission des écoles protestantes du Grand Montréal, Curriculum Department, 1974.
18 f. ; 28 cm.

Comprend du texte en français. Titre de la couv. "A report submitted by the Curriculum Department to the Protestant School Board of Greater Montreal".

Cote Dewey: 372.654/G327e Cote LC: LB/1528

Descripteur(s): *Français (Langue) *Langue seconde *Classe d'immersion *Evaluation de l'apprentissage *Evaluation de programmes *Primaire (Niveau)

Présentation des résultats d'une étude réalisée dans le cadre de l'évaluation d'un programme d'immersion en langue française pour les élèves anglophones de quatrième année. Il s'agit de comparer les performances scolaires (anglais, français, mathématiques) des élèves inscrits dans des classe d'immersion en 1973-1974 avec celles de groupes témoins des secteurs anglophone et francophone de l'enseignement.

Trois groupes d'élèves en provenance de quatre écoles de la région montréalaise ont participé à l'enquête: 54 élèves inscrits dans des classes d'immersion, 70 élèves anglophones suivant l'enseignement régulier, enfin 40 élèves fréquentant une école francophone. Les tests suivants ont été administrés en juin 1974: trois sections du "Metropolitan achievement test" et un test d'écriture visaient à connaître le degré de maîtrise de la langue anglaise et des mathématiques; pour ce qui est de la connaissance du français, on a utilisé un test de production orale, un test de compréhension auditive, un exercice de lecture et les Tests de rendement en français et en mathématiques de la CECM.

Des progrès substantiels ont été enregistrés dans les classes d'immersion en ce qui concerne la maîtrise du français, progrès de loin supérieurs à ceux des élèves suivant des cours réguliers. Le groupe d'immersion a d'ailleurs obtenu des résultats comparables à ceux des élèves francophones en ce qui concerne les Tests de rendement en français et en mathématiques. Par ailleurs, les élèves des classes d'immersion se maintiennent au niveau de leurs confrères des classes régulières pour ce qui est de la maîtrise de leur langue maternelle.

Type de document: r
Région(s) administrative(s): 063
Financement: Bénéficiaire - BEPGM
Organisme(s) source(s) - MEQ - DGEES

Programme(s) de subvention - PARC

Auteur de l'analyse: ar

E D U Q 8270381

EVALUATION OF THE 1973-1974 GRADE IV

FRENCH-IMMERSION CLASS

A report submitted
by the Curriculum Department to

THE PROTESTANT SCHOOL BOARD OF GREATER MONTREAL

by

Fred Genesee
Sandra Morin
Terri Allister

September 1974

E D U Q 8270381

TABLE OF CONTENTS

	Page
Introduction	1
Sample	1
Test Battery	3
English Language Tests	3
French Language Tests	4
Results	6
I.Q.	6
English Language Tests	6
French Language Tests	12
Summary	18

INTRODUCTION

The findings presented in the current report are a continuation of the on-going evaluation of the early French-immersion programs (see Polich, 1973). As with previous evaluations, this study attempted to assess the status of the immersion students' English language and mathematics skills and to evaluate their progress in French-language learning. As well as comparing the students to other anglophone students following the traditional French-as-a-second language program they were compared to native-French-speaking youngsters attending a French school in the P.S.B.G.M. Of particular interest in this study was the evaluation of the English writing skills of the immersion group. As well, the various experimental groups were divided into average, above average and below average I.Q. groups in order to assess the relevance of intelligence in second language learning.

SAMPLE

Three groups of students were tested: (1) students in grade IV French Immersion (Immersion Group); (2) students in the grade IV English program (Non-immersion); and (3) francophone students in grade IV of a French elementary school in the P.S.B.G.M. (French Control). See Table 1A for the sample sizes.

The students in all three groups were classified into one of three I.Q. groups: (1) average--(96-115); (2) above average--(116+); and (3) below average--(95 and below). The I.Q. score that was used to classify the anglophone students was based on the students' performance on the Lorge-Thorndike Intelligence Test which they had written in October, 1973. The I.Q. score available for the francophones was the Lavoie-Laurendeau Test Collectif d'Intelligence Général (1960).

TABLE 1

(A)

SAMPLE SIZES

	I.Q.		
	Above Average	Average	Below Average
Immersion	25	18	11
Non-immersion	23	24	23
French Control	5	19	16

(B)

SCHOOLS TESTED

Immersion and Non-Immersion	French Control
Willingdon	Peace Centennial
Meadowbrook	
Edinburgh	

It should be pointed out here that this French group is not the most appropriate francophone control for two reasons. First, the French Control school is located in a neighbourhood which generally would be considered lower on the socioeconomic scale than the neighbourhood of either the Immersion group or the Non-immersion group. Secondly, there is a very large immigrant population in this French Control group which probably makes them more ethnically heterogeneous than either of the other two groups. As well, because there is a larger immigrant component in the French Control group, they are probably not completely representative of a French Canadian grade IV sample. These features of the French group should be kept in mind when comparing the English-speaking students' French skills to those of the French-speaking students.

The specific schools constituting each group are listed in Table 1B.

TEST BATTERY

There were two areas of evaluation: 1) English-language skills and 2) French-language skills. The two English samples, Immersion and Non-immersion were given both types of tests. The French Control group was given only the French-language tests. All tests were administered in June, 1974.

English-Language Tests

1) Reading: The Reading subtest of the Metropolitan Achievement Test, M.A.T. (1970) was administered. This is a group test and is timed. The test consists of eight prose passages with multiple-choice questions related to each. Raw scores were converted to standard score form for statistical analysis.

2) Word Knowledge: The Word Knowledge subtest of the M.A.T. was administered. Again, this is a timed, group test. The test consists of 50 items. Each item consists of a sentence stem, such as "Night is the opposite of .....", which the child completes by selecting one of the four choices--

in this example: "dawn", "cool", "day" or "camp". Again, the raw scores were converted to standard score form for statistical analysis.

3) Mathematics: The Arithmetic Problem Solving and Concepts subtest of the M.A.T. was administered. Again, this is a timed, group test. It consists of 40 multiple-choice items which test conceptual skills in Mathematics as well as some computational skills. Standard scores were analyzed.

4) Writing: Each student was asked to write a composition by completing one of three introductory sentences presented to him. The choice of topic sentence was left entirely to the student. The students were given approximately 45 minutes to complete the composition.

French-Language Tests

1) Reading: A modified version of the Test de Lecture "California" was administered. This is a group test developed for use with the native-French speaking children. It consists of five subtests: discrimination visuelle, antonymes, synonymes, directive à suivre and interprétation des textes. The discrimination visuelle section requires the child to decide whether two words, presented side by side, are the same word or different words. As their names imply, the antonymes and synonymes sections ask the child to select one of four alternatives which means the opposite of or the same as, respectively, a target word. Since the first three subtests all deal with word skills, the scores for the three subtests were combined and the combined score was analyzed. The maximum possible score on these three sections combined is 52. The directive à suivre section consists of 10 items each requiring the student to follow an instruction (e.g. Ecrivez la troisième lettre du dernier mot de cette phrase: E A R T). The interpretations des textes section consists of two prose passages with multiple-choice questions. Since the last two sections deal with comprehension of prose the scores for these sections were combined and this combined score was used in the analysis.

2) Test de Rendement en Français (grade IV level): This is a standardized test developed by La Commission des Ecoles Catholiques de Montréal. It consists of 40 multiple-choice items measuring language skills such as spelling, vocabulary, antonymes, synonymes, conjugation, grammar and comprehension of oral text. In November of each academic year the test is standardized on the current school population and stanine values are calculated. Both raw scores and stanine scores were analyzed statistically.

3) Test de Rendement en Mathématiques (grade IV level): Again, this test is developed and standardized by the C.E.C.M. each November. It consists of 35 multiple-choice items. It must be kept in mind that there are differences in the mathematics curricula of the P.S.B.G.M. and the C.E.C.M. and this is probably a contributing factor in the performance of the P.S.B.G.M. students.

4) Listening Comprehension: This test was developed by the Centre Educatif et Culturel Inc. (1969) to classify speakers of French as a second language. In addition to testing listening comprehension skills of an associative nature (e.g. matching oral descriptions to pictures) it tests the child's ability to interpret spoken material (e.g. pick one of four sentences which best describes what occurred in a short story presented orally). This test was presented in uniform fashion by means of a taperecorder. The maximum possible score on this test is 37.

5) Oral production: Each student was interviewed individually by one of two French-speaking testers, one a native-French speaker, the other, a native-English speaker with complete functional competence in French. In the first part of the interview the children were asked to describe a story presented in the form of a cartoon sequence. Subsequently, they were engaged in a short conversation with the tester on topics related to the cartoon story and their French-immersion experience. The interviews were taperecorded for later analysis.

RESULTS

I.Q. Results

A two-way analysis of variance (least squares solution for unequal n) was performed on the I.Q. scores which had been determined in October, 1973. The main variables were School group (Immersion, Non-immersion and French Control) and I.Q. (average, above average and below average). A summary of the mean I.Q. score per group is presented in Table 3.

There was no significant difference between the School groups ($F = 2.70$; $df = 2, 155$, $p = .07$). There was, however, as expected, a difference between the I.Q. groups ($F = 346.33$; $df = 2, 155$; $p < .001$). This finding simply confirms the differences in the I.Q. groups that were selected ab initio differ.

English-Language Tests

Three separate two-way analyses of variance were performed on the standard scores derived from the Reading subtest, the Word Knowledge subtest and the Arithmetic Concepts subtest of the Metropolitan Achievement Test. The main variables were School group (Immersion, Non-immersion) and I.Q. (average, above average, below average).

TABLE 2

SUMMARY OF ENGLISH-LANGUAGE TEST RESULTS

TEST	SCHOOL GROUP				I.Q. GROUP				
	Immersion	Non-Immersion	F	P	Above Average	Average	Below Average	F	P
Reading	77.97	77.30	.13	.72	84.60	76.67	71.64	16.47	<.001
Word Knowledge	77.02	76.90	.004	.96	85.13	74.60	71.15	16.24	<.001
Arithmetic Problem Solving and Concepts	84.24	82.47	1.31	.26	90.49	83.96	75.63	30.77	<.001
Writing Skills:									
Spelling	3.00	3.46	7.80	<.05	3.59	3.18	2.92	5.57	<.01
Sentence Accuracy	2.61	2.42	2.35	>.05	3.03	2.37	2.15	9.92	<.01
Sentence Complexity	2.53	2.36	2.05	>.05	2.95	2.36	2.01	12.18	<.01
Organization	2.66	2.43	2.17	>.05	3.01	2.43	2.20	8.50	<.05
Originality	2.20	2.01	4.77	<.05	2.36	2.02	1.95	5.33	<.05
Overall	2.57	2.37	2.96	>.05	2.99	2.37	2.00	10.51	<.01
Punctuation:									
Appropriate	83%	61%							
Inappropriate	17%	39%							
Length:									
Appropriate	70%	49%							
Inappropriate	30%	51%							
Vocabulary:									
Superior	11%	7%							
Average	84%	80%							
Below Average	5%	13%							

Reading: A summary of the mean reading scores along with the appropriate F and p values is presented in Table 2.

There were no significant difference between the School groups ($F = .13$; $df = 1, 118$; $p > .05$)-- the Immersion group ($\bar{x} = 77.97$)* was reading as well as the Non-immersion group ($\bar{x} = 77.30$).

There was a significant difference between the I.Q. groups ($F = 16.47$; $df = 2, 118$; $p < .001$)-- as expected, the above average group ($\bar{x} = 84.60$) scored highest, followed in descending order by the average ($\bar{x} = 76.67$) and below average group ($\bar{x} = 71.64$).

Word Knowledge: A summary of the mean word knowledge scores and corresponding F and p values is presented on Table 2.

There was no significant difference between the School groups ($F = .004$ $df = 1, 116$; $p > .05$)-- the Immersion group ($\bar{x} = 77.02$) scored as well as the Non-immersion group ($\bar{x} = 76.90$).

There was a significant difference between the I.Q. groups ($F = 16.24$: $df = 2, 116$; $p < .001$)-- again, the above average group ($\bar{x} = 85.13$) scored highest, followed in descending order by the average group ($\bar{x} = 74.60$) and the below average group ($\bar{x} = 71.15$).

Arithmetic Problem Solving and Concepts: A summary of the mean arithmetic scores and corresponding F and p values is presented in Table 2.

There was no significant difference between the School groups ($F = 1.31$, $df = 1, 118$; $p > .05$)-- the Immersion group ($\bar{x} = 34.24$) scored as high as the Non-immersion group ($\bar{x} = 82.47$).

There was a significant difference between the I.Q. groups ($F = 30.77$; $df = 2, 118$; $p < .001$)-- again, the above average group ($\bar{x} = 90.49$) scored highest, followed by the average ($\bar{x} = 83.96$) and the below average groups ($\bar{x} = 75.63$).

---

* $\bar{x}$ = average or mean score

In summary, the Immersion students performed as well as the students in the English program on the reading, word knowledge and arithmetic tests. Thus, there is no evidence from these tests, at least, that as a result of following the first four years of elementary school in a French-immersion program the children have suffered any harmful effects to their English-language or arithmetic skills.

English Writing Skills

Each composition was marked by two grade 4 teachers from the P.S.B.G.M. on nine different scales -- see Appendix A for a copy of the rating scale that was used. The teachers did not know which school or I.Q. group each child belonged to. The ratings for spelling, sentence accuracy, sentence complexity and variety, organization, originality and overall were analyzed by six separate analyses of variance. The main variables were school group (Immersion, Non-immersion), I.Q. (average, above average, below average) and Marker (1 and 2). The ratings for punctuation, length and vocabulary could not be analyzed using analyses of variance because of the limited number of response categories for each dimension. Instead, a frequency count was made of each rating for each dimension -- see Table 2. First, the results from the analyses of variance will be discussed.

Spelling: A summary of the mean scores on spelling is presented in Table 2.

There was a significant difference between the School groups ($F = 7.80$; $df = 1, 47$; $p = .02$)-- the Immersion students ($\bar{x} = 3.00$) made more spelling errors that did the Non-immersion students ($\bar{x} = 3.45$)-- the average does not represent the number of errors, but, rather a category of number of errors.

There was also a significant difference between the I.Q. groups ($F = 5.57$; $df = 2, 67$; $p < .01$)-- the above average students ($\bar{x} = 3.59$) made fewer errors than either the average ($\bar{x} = 3.18$) or below average students ($\bar{x} = 2.92$).

Sentence Accuracy: A summary of the mean scores is presented in Table 2.

There was no significant difference between the School groups ($F = 2.35$; $df = 1, 63$; $p > .05$)-- both the Immersion ($\bar{x} = 2.61$) and the Non-immersion group ($\bar{x} = 2.42$) were rated below average in terms of grammatical correctness.

Again, there was a significant difference between I.Q. groups ($F = 9.92$; $df = 2, 9$; $p < .01$)-- the above average group ($\bar{x} = 3.02$) was rated more highly than either the average ($\bar{x} = 2.37$) or the below average group ($\bar{x} = 2.15$).

Sentence Complexity and Variety: A summary of the mean scores is presented in Table 2.

There was no significant difference between the School groups ($F = 2.05$; $df = 1, 41$, $p > .05$)-- again, both the Immersion ($\bar{x} = 2.53$) and the Non-immersion students ($\bar{x} = 2.36$) were rated below average and needing of work on this dimension.

There was a significant difference between the I.Q. groups ($F = 12.18$; $df = 2, 9$; $p < .01$)-- the above average group ($\bar{x} = 2.95$) was rated highest, followed in descending order by the average ($\bar{x} = 2.36$) and below average group ($\bar{x} = 2.01$).

Organization: A summary of the mean scores on organization is presented in Table 2

There was no significant difference between the School groups ($F = 2.17$; $df = 1, 5$; $p > .05$)-- again, both the Immersion ($\bar{x} = 2.66$) and the Non-immersion students ($\bar{x} = 2.42$) were rated at just below average on this dimension.

There was a significant difference between I.Q. groups ($F = 8.50$; $df = 2, 7$; $p < .05$)-- the above average group ($\bar{x} = 3.01$) was rated higher than either the average ($\bar{x} = 2.43$) or below average group ($\bar{x} = 2.20$).

Originality: A summary of the mean originality scores are presented in Table 2.

There was a significant difference between the School groups ($F = 4.77$; $df = 1, 46$; $p < .05$)-- the Immersion students ($\bar{x} = 2.20$) were rated more original than the Non-immersion students ($\bar{x} = 2.01$).

As well, there was a significant difference between the I.Q. groups ($F = 5.33$; $df = 2, 12$; $p < .05$)-- the relative standing of each group was the same as in the previous dimension.

Overall: A summary of the means is presented in Table 2.

There was no significant difference between the School groups ($F = 2,96$; $df = 1, 64$; $p > .05$)-- both groups (Immersion = 2.57; Non-immersion = 2.37) were rated average or below average.

Again, there was a significant difference between I.Q. groups ($F = 10.51$; $df = 2, 10$; $p < .01$) with the above average group ($\bar{x} = 2.99$) being rated highest, followed in descending order by the average ($\bar{x} = 2.37$) and below average group ($\bar{x} = 2.00$).

Punctuation, Length and Vocabulary: In terms of Punctuation, the Immersion students were rated more favorably than the Non-immersion students insofar as 83% of them were given a rating of "appropriate" as compared to 61% for the Non-immersion students.

In terms of Length, again the Immersion students were rated more favorably than the Non-immersion students-- 70% of the Immersion students received a rating of "appropriate" whereas 49% of the Non-immersion students were rated "appropriate" on this dimension.

In terms of Vocabulary, there was very little difference between the two groups. If anything, however, more of the Immersion students were rated as having a superior vocabulary (11%) than were the Non-immersion students (7%).

In summary, there is no evidence that the writing skills of the Immersion children were any worse than those of the Non-immersion students, by the end of Grade 4, in terms of the following aspects of writing--spelling, grammar, sentence complexity and organization. On the contrary, where differences did exist between the two groups of pupils they tended to favor the Immersion students. Thus, the evaluators felt that the Immersion group was more original in their composition and they were more appropriate in their use of punctuation and in the length of their compositions than was the Non-immersion group. This is quite encouraging in view of the fact that the Immersion students have had relatively less practice writing English than have the Non-immersion students.

In general, the compositions were not rated very good. On all of the first six dimensions the students were rated as average or just below average. This may be due, in part to the test situation and the time of testing (late June.)

French-Language Tests

Separate analyses of variance were performed on the scores from the following tests: reading 1 (words and phrases), reading 2 (prose passages), Test de Rendement en Français (raw scores and stanine equivalents), Test de Rendement en Mathematiques (raw scores and stanine equivalents) and listening comprehension. Again, the main variables were School group and I.Q. group.

Reading: A summary of the mean scores for reading subtest 1 and 2 along with the corresponding F and p values is presented in Table 3.

In both subtests 1 and 2 there was a significant difference between the School groups. In both cases the French Controls received the highest score, followed in descending order by the Immersion group and the Non-immersion group. In subtest 2 the Immersion students ($\bar{x}$ = 14.78) performed almost as well as the French Control students ($\bar{x}$ = 15.54).

In both subtests there was also a significant difference between the I.Q. groups (see Table 3). In both cases the above average group scored higher

TABLE 3
SUMMARY OF FRENCH-LANGUAGE TEST RESULTS
(INCLUDING I.Q. RESULTS)

TEST	SCHOOL GROUP					I.Q. GROUP				
	Immersion	Non-Imm	French	F	P	Above	Average	Below	F	P
I.Q.	108.67	105.68	106.36	2.70	.07	124.81	106.59	89.31	346.35	<.001
Reading										
Test 1	38.17	30.83	42.55	69.07	<.001	39.72	36.63	35.21	10.47	<.001
Test 2	14.78	9.54	15.54	38.06	<.001	15.42	12.68	11.76	17.93	<.001
T. de R. en Français										
Raw scores	25.10	11.17	32.52	244.69	<.001	25.42	23.61	19.76	17.44	<.001
Stanines	4.36	1.33	6.56	208.00	<.001	4.60	4.28	3.36	12.47	<.001
T. de R. en Math.										
Raw scores	23.52	12.06	23.22	49.40	<.001	23.07	19.59	16.15	13.84	<.001
Stanines	5.20	2.19	4.95	47.28	<.001	5.09	4.04	3.21	14.99	<.001
Listening Comprehension	30.30	16.61	30.94	301.48	<.001	26.95	26.15	24.74	5.75	.003
Oral Production										
Comprehension	4.97	3.32	5.00	47.07	<.01	4.49	4.52	4.28	.72	> .05
Pronunciation	4.03	3.17	4.92	51.51	<.01	3.92	4.28	3.93	5.28	< .05
Grammar	4.49	2.64	4.91	50.46	<.01	4.14	4.13	3.77	1.49	> .05
Vocabulary	4.81	2.36	5.00	92.43	<.01	4.10	4.24	3.83	1.23	> .05
Communication	4.61	3.12	4.94	79.40	<.01	4.32	4.29	4.06	1.96	> .05

than either the average or below average group.

Thus, these findings indicate that the Immersion students were significantly better at reading French either in the form of simple phrases or as connected prose than were the Non-immersion students. Proficiency in reading was correlated with I.Q. level for both the anglophone students and the francophone students.

Test de Rendement en Français (level IV): A summary of the mean raw scores and stanines is presented in Table 3 along with the corresponding F and p values.

There was a significant difference between the School groups in the analyses of both the raw scores and the stanines -- the French Control group received the highest raw score ($\bar{x}$ = 32.52) followed in descending order by the Immersion group ($\bar{x}$ = 25.10) and the Non-immersion group ($\bar{x}$ = 11.17).

In terms of stanine scores the French Control group had a stanine of 6.56; the Immersion group had 4.36; and the Non-immersion group had 1.33. This means that the French Controls scored in the top stanine of the average group while the Immersion students scored in the bottom stanine of the average and the Non-immersion students scored in the low category -- see Appendix C for an interpretation of a stanine scale.

There was also a significant difference between the I.Q. groups in both the analyses of raw and stanine scores. In both cases the rank order from highest score to lowest was above average group, average and below average. This finding is not unexpected.

Thus, the Immersion students performed at a level equivalent to the average of the C.E.C.M. grade 4 population; remember, however, norms for this test were established in November 1973.

Test de Rendement en Mathematiques (level IV): A summary of the mean raw scores and mean stanines is presented in Table 3 along with the corresponding F and p values.

Again, there was a significant difference between the School groups for both types of scores. However, this time the French Control group and Immersion group had equivalent scores ($\bar{x}_{Fc}$ = 23.22; $\bar{x}_{I}$ = 23.52), and both were superior to the Non-immersion group with an average score of 12.06.

In terms of stanines, both the French Control and the Immersion students scored in the average category (French = 4.95; Immersion = 5.20) and the Non-immersion students scored in the bottom stanine of the below average category.

Again, there were significant differences between the I.Q. groups, as expected -- the rank order from highest to lowest was above average, average below average.

In summary, the Immersion students performed at a level comparable to the average student in the C.E.C.M. as of November, 1973. This was true also of the French Control students. The Non-immersion students, on the other hand, performed below average.

Listening Comprehension

A summary of the mean scores on listening comprehension for each School and I.Q. group is presented in Table 3.

There was a significant difference between the School groups (F = 301.48; df = 2, 154; $p < .001$)-- the Immersion and French Control group performed equally well ($\bar{x}_{I}$ = 30.30; $\bar{x}_{Fc}$ = 30.94), and both scored higher than the Non-immersion students ($\bar{x}$ = 16.61). Considering that the maximum possible score on this test is 37, the Immersion students did well indeed.

There was also a significant difference between the I.Q. groups (F = 5.75; df = 2, 154; $p < .01$)-- the above average ($\bar{x}$ = 26.95) and the average group ($\bar{x}$ = 26.15) scored higher than the below average group ($\bar{x}$ = 24.74).

Oral Production Skills

The speech samples elicited from each child were evaluated independently by two native-French speakers along a number of different dimensions--comprehension, pronunciation, grammar, vocabulary and communicativeness. An example of the rating scale and dimensions used in the evaluation is presented as Appendix B. The evaluators did not know which school or I.Q. group each child belonged to. The evaluators were not specailly trained linguists; they were university-aged French Canadians. It was felt that since in most day-to-day situations in which one speaks a second language one is evaluated by "ordinary" people, it would be more meaningful in a subjective evaluation of the pupils' speaking skills to use "ordinary" people.

Five separate three-way analyses of variance were performed on the data; one for each of the dimensions listed above. The main variables in each analysis were School group (Immersion, Non-immersion, French Control), I.Q. (average, above average and below average) and Marker (1 and 2). Including Marker as a separate variable makes it possible to assess how consistent the two evaluators were. There was no significant difference between the Markers on all five dimensions, nor was there any difference in how the two markers evaluated the three School groups. Since there was such strong agreement between the Markers no further mention will be made of the Marker variable.

On all five dimensions there was a significant difference between the School groups. In every case, the rank order from highest rating to lowest was French Control, Immersion and Non-immersion. Table 3 presents a summary of the mean ratings for each School group on each dimension; the appropriate F and p values are also presented. It is particularly remarkable how closely the Immersion group was rated to the French Control group. In general, the Immersion group was rated between 4 and 5 on all dimensions indicating that their command of French is excellent considering the fact that they are not native speakers of French.

The ratings of the Non-immersion students, on the other hand, suggest they were having difficulty communicating in French.

On four of the five dimensions -- comprehension, grammar, vocabulary and communicativeness -- there were no significant differences between the I.Q. groups -- see Table 3 for a summary of the mean scores by I.Q. Only on Pronunciation was there a significant I.Q. difference. In this case the average group ($\bar{x}$ = 4.28) scored highest followed by the above average ($\bar{x}$ = 3.92) and below average groups ($\bar{x}$ = 3.92) who were rated equivalent.

Thus, in general, these findings suggest that the below average student is able to master the informal communicational aspects of French as well as the average or above average student. A similar lack of correlation between I.Q. and communication skills in French has been noted in the evaluation of the Grade 11 French-immersion class except that this group did not include a below average sample.

SUMMARY

The findings of the present report are consistent with those of an earlier report (Polich, 1973) on the assessment of the preceding Grades 1,2 and 3 immersion classes.

In the area of English language development the present immersion students performed at par with the English Control students in the following areas - vocabulary skills, reading, writing and arithmetic. The only difficulty that was evident was a small one related to spelling during free writing. The other aspects of their writing skills were equivalent to the English youngsters in the English program. In terms of originality of their writing they were rated above the English Control students.

In the area of French-language achievement, as in previous evaluations in this Board and in others across Canada (Swain, 1972), the Immersion students demonstrated a working knowledge of French far superior to that of the students in the traditional French-as-a-second-language courses. The immersion students were rated excellent on all aspects of their speaking skills; they scored at a level equivalent to the average student in the C.E.C.M. on both the Test de Rendement en Français and en Mathématiques, and they were able to comprehend as much as the francophone controls on the listening test.

One interesting finding which has not been reported before is that although there is a correlation between I.Q. and formal skills in French-reading, mathematics, and skills measured by the Test de Rendement en Français, there is no strong relationship between French speaking and listening skills and I.Q. level. These latter skills might be regarded as informal or communicational skills. These findings suggest that variables other than purely intellectual ones are as important or more important in second language learning than is I.Q.

In general, the immersion students continue to gain in their mastery of French while at the same time maintaining and developing their native language in all its aspects.

APPENDIX A
ENGLISH COMPOSITION

Student code number_____

(A) SPELLING:

Perfect, no errors---------- 5

Three errors or less---------- 4
Four, 5 or 6 errors---------- 3
Seven or more mistakes---------- 2
Unacceptable for a grade 4 students---------- 1

* PLEASE CIRCLE ERRORS

(B) PUNCTUATION: Please star (*) punctuation errors.

Appropriate _____

Inappropriate _____

(C) LENGTH:

Appropriate: fully developed his ideas in appropriate length_____

Inappropriate: far too long and rambling or too _____
too short without completing ideas _____

(D) SENTENCE ACCURACY: grammatical correctness,
writing in complete, correct sentences

Excellent: consistent use of complete, well-formed
sentences; no major errors---------- 5

Very Good: some major errors; generally above standard------ 4

Satisfactory: adequately meets objectives of grade 4 level-- 3

Below Standard: many major errors; needs work---------- 2

Unacceptable for grade 4 level---------- 1

*UNDERLINE GRAMMATICAL ERRORS

(E) SENTENCE COMPLEXITY AND VARIEY

Excellent: superior use of subordination in a meaningful
way---------- 5

Better than average use of subordination---------- 4
Average use of appropriate subordination and simple sentences -
meets standards of grade 4 level---------- 3
Over use of simple sentences: needs work---------- 2

Far below grade 11 level---------- 1

APPENDIX A (cont'd)

ENGLISH COMPOSITION page 2

(F) ORGANIZATION: ideas flow smoothly from opening sentence; ideas well-developed; use of paragraphing where appropriate; story conclusion.

Excellent: outstanding organization---------- 5
Above average: coherent flow of ideas with good ending------- 4
Meets Grade 4 standards: generally coherent flow of ideas with suitable ending---------- 3
Below standard: at times incoherent; no ending---------- 2
Totally inadequate:---------- 1

(G) VOCABULARY:

Superior---------- 3
Average for expectations of Grade 4---------- 2
Below average expectations---------- 1

(H) ORIGINALITY:

Very imaginative---------- 4
Above average---------- 3
Ordinary---------- 2
Dull and uninteresting---------- 1

(I) OVERALL RATING:

A - Excellent

B - Above average

C - Average

D - Below average

E - Unsatisfactory

APPENDIX B

EVALUATION DE LA PRODUCTION ORALE EN FRANCAIS

INITIALES DU CORRECTEUR_____ NOM_____

ANNEE_____

A) Compréhension générale pendant la conversation

Comprend tout..... 5
Très peu de répétition nécessaire pour la compréhension..... 4
A besoin qu'on répète certaines questions pour bien comprendre... 3
A besoin que quelques phrases soient traduites en anglais pour comprendre..... 2
A besoin que la plupart des questions soient traduites en anglais pour comprendre..... 1

B) Prononciation

Prononce comme si le français est sa langue maternelle..... 5
Quelques mots sont mal prononcés, mais la communication ne s'en trouve pas affectée..... 4
Prononciation inconsistante, menant parfois à des contresens..... 3
Graves défauts de prononciation. La communication s'en trouve trés affectée..... 2
Elocution très difficile à comprendre. Communication gravement affectée..... 1
Ne parle pas assez pour pouvoir être évalué..... 0

C) Grammaire et Syntaxe

Pas d'erreur de grammaire ni de syntaxe. Connaissance convenable de la grammaire et de la syntaxe..... 5
Erreurs grammaticales ou syntaxiques occasionnelles..... 4
De nombreuses erreurs de grammaire et de syntaxe amenant un langage parfois obscur..... 3
Grammaire et syntaxe très insuffisantes. Langage souvent incompréhensible..... 2
Elocution diffifile à comprendre. De trop nombreuses erreurs graves..... 1
Ne parle pas assez pour pouvoir être évalué..... 0

D) Vocabulaire

Vocabulaire équivalent à celui d'un francophone de son âge..... 5
Quelques erreurs: En général, vocabulaire suffisant. Rare mot anglais ou anglicismes..... 4
Vocabulaire assez simple, mais quand même suffisant. Parfois un mot anglais ou un anglicisme..... 3
Le mauvais mot trop souvent. Beaucoup de mots anglais et d'anglicismes. Malentendus à cause de ce manque de vocabulaire.. 2
Vocabulaire insuffisant pour pouvoir s'exprimer..... 1
Ne parle pas assez pour pouvoir être évalué..... 0

APPENDIX B (cont'd)

EVALUATION DE LA PRODUCTION ORALE EN FRANCAIS

E) Communication

Facilité d'espression et désir de communiquer en français: supérieurs..... 5

Facilité d'expression et désir de communiquer en français: au dessus de la moyenne..... 4

Facilité d'expression et désir de communiquer en français: moyens..... 3

Facilité d'expression et désir de communiquer en français: inférieurs à la moyenne..... 2

Refus de s'exprimer en français..... 1

APPENDIX C

INTERPRETATION OF STANINE SCORES

Stanine - The stanine scale is a simple nine point scale of standard scores. (The word stanine was derived for STAndard NINE-point scale). In this scale, raw scores are converted to scores which range from 1 (low) to 9 (high) with a mean of 5 and a standard deviation of 2.

Figure 1. Percentage of Cases at Each Stanine Level